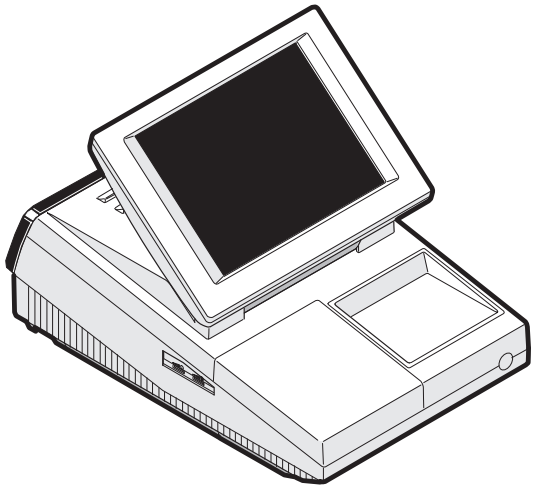
SHARP INSTALLATION MANUAL

CODE : 00ZUP3301VI2E



POS TERMINAL

MODEL UP-3301

(For "V" version)

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Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS.

AVOID: SHORT-CIRCUITING THE BATTERY TERMINALS.
KEEP THE BATTERY AWAY FROM FIRE.

* WHEN DISPOSING THE BATTERY, FOLLOW THE LOCAL
RULES AND REGULATIONS.

"BATTERY DISPOSAL"

THIS PRODUCT CONTAINS NICKEL-METAL HYDRIDE BATTERY.
THIS BATTERY MUST BE DISPOSED OF PROPERLY.
REMOVE THE BATTERY FROM THE PRODUCT AND CONTACT FEDERAL OR
STATE ENVIRONMENTAL AGENCIES FOR INFORMATION ON RECYCLING AND
DISPOSAL OPTIONS.

Precautions

- Before installation, be sure to turn off the AC power.
- Use gloves to protect your hands from being cut by the angle and the chassis.
- Connect all the cables securely. When connecting or disconnecting the cables, be careful not to apply stress to the cables.
- Ground the human body to prevent against troubles and dust adhesion to the LCD unit by static electricity. When assembling the LCD, use a discharge blower to prevent against dust intrusion.
- Be careful to the high voltage of the inverter PWB transformer.

Requirements for soldering circuit parts

To solder the following parts manually, follow the conditions described below.

PARTS NAME	PARTS CODE	LOCATION	CONDITIONS FOR SOLDERING
Ceramic oscillator	RCRMZ7002RCZZ	MAIN PWB: X1 (8M)	270°/3sec.
	RCRMZ7004RCZZ	MAIN PWB: X2 (7.37M)	270°/3sec.

Note for handling of Touch panel

- The transparency of the touch panel is vitally important. Do not place finger prints or moisture on the surface. When handling, use clean gloves and masks.
- For handling, do not hold the transparent area, and do not hold the heat seal connector section to assure reliability.
- Do not overlay touch panels. The edge may damage the surface.
- Do not put a heavy object on the touch panel.
- Do not apply strong shocks, and do not drop.
- When attaching the protection film, carefully check that no dirt exists.
- To clean dirt on the surface, use a dry, soft cloth or a cloth immersed in ethyl alcohol.
- Check that the housing does not induce any stress to the touch panel.
- Be careful not to touch the touch panel with tools.
- The heat seal section is easily disconnected. Be careful not to apply any stress to the heat seal section when installing.
- The touch panel is provided with an air groove to make the external and the internal air pressure equal to each other. If water or oil is put around the air groove, it may penetrate inside. Be careful and keep the air groove away from water and oil.
- Input is performed with fingers. Do not use hard objects to input entries.

Note for handling the LCD assembly

- The LCD elements are made of glass. BE careful not to expose them to a strong mechanical shock. Use extreme care not to break them.
- If the LCD element is broken and the liquid is seeps, do not lick it. If the liquid comes in contact with your skin or clothes, immediately clean with soap.
- Use the unit under the rated conditions to prevent against damage.
- Be careful not to drop water or other liquids on the display surface.
- The reflection plate and the polarizing plate can be easily scratched. Be careful not to touch them with any hard object such as glass or tweezers. Never hit, push, or rub the surface with hard objects.
- When installing the unit, be careful not to apply stress to the LCD module. If excessive stress is applied an abnormal display or uneven color may result.

Cautions on handling connectors

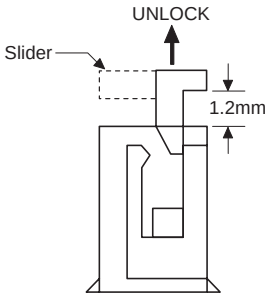
When connecting or disconnecting the following connectors, follow the procedures below.

1)

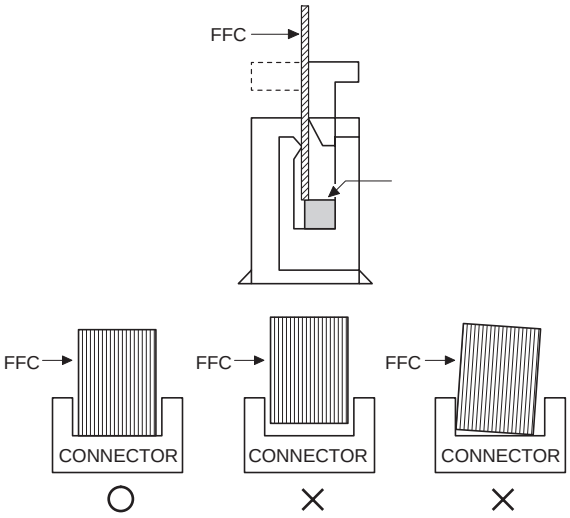
PARTS NAME	PARTS CODE	LOCATION
FFC CONNECTOR	QCNCW7207RC4J	MAIN PWB: CN6 TOUCH PWB: CN5
FFC CONNECTOR	QCNCW7183BH2F	MAIN PWB: CN1

• How to Connect or Disconnect the FFC Connector

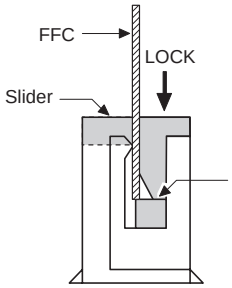
(1) Open the slider to the unlock position
The slider will open only up to a fixed height (about 1.2mm). If you used force to pull up the slider further, it may be damaged.



(2) Insert the FFC
Insert the FFC firmly untill the FFC hits the bottom of the connector's insulator.



(3) Close the slider to the lock position
Insert the FFC and then push the slider downward.

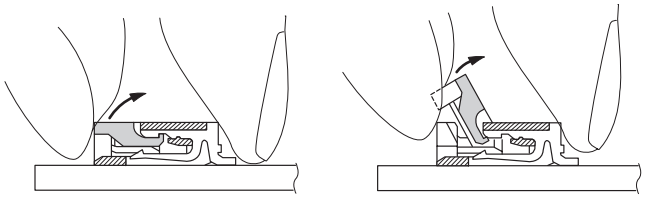


2)

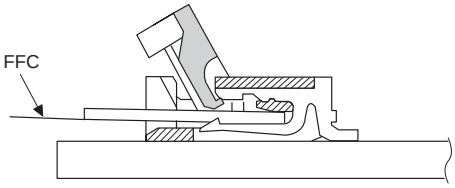
PARTS NAME	PARTS CODE	LOCATION
FFC CONNECTOR	QCNCW7217RC3J	TOUCH PWB: CN1

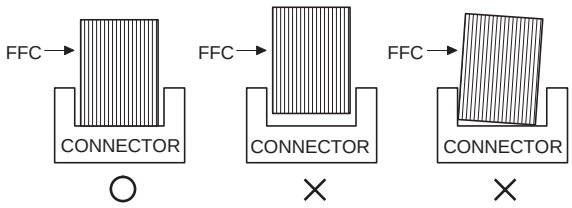
• How to Insert the FFC Connector

(1) Open the slider to the unlock position
Open the slider upwards up to an angle of 60 degrees. If the slider does not fully open, the FFC can not be smoothly inserted.

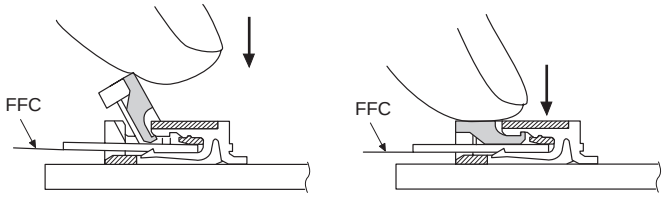


(2) Insert the FFC
Insert the FFC firmly until the FFC hits the bottom of the connector's insulator.





(3) Close the slider to the lock position
Insert the FFC and then push the slider downward.



(4) To pull out the FFC out, unlock the slider, then pull it out in the same procedures as (1).

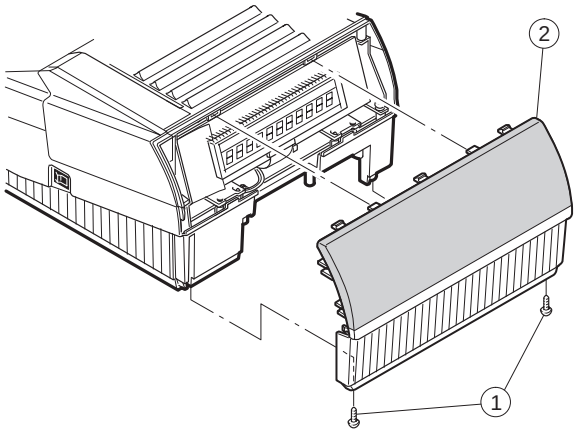
Caution for handling the Rear Display PWB unit

SYSTEM RESET is controlled by the battery-protected CKDC9 (1 chip microcomputer) on the rear display PWB.

1. Removing the Rear display filter

1) Remove the two Screws ①.

2) Remove the Rear display filter ②.



2. Replacing the Rear display filter

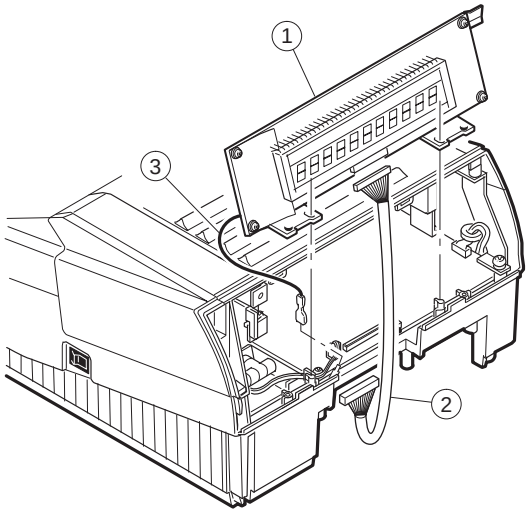
Install the Rear display filter in the reverse order of removal.

3. Removing the Rear display

When the rear display is removed and then reinstalled, service resetting is required.

1) Removing the Rear display ①.

2) Removing the Rear display cable ②.



4. Replacing the Rear display

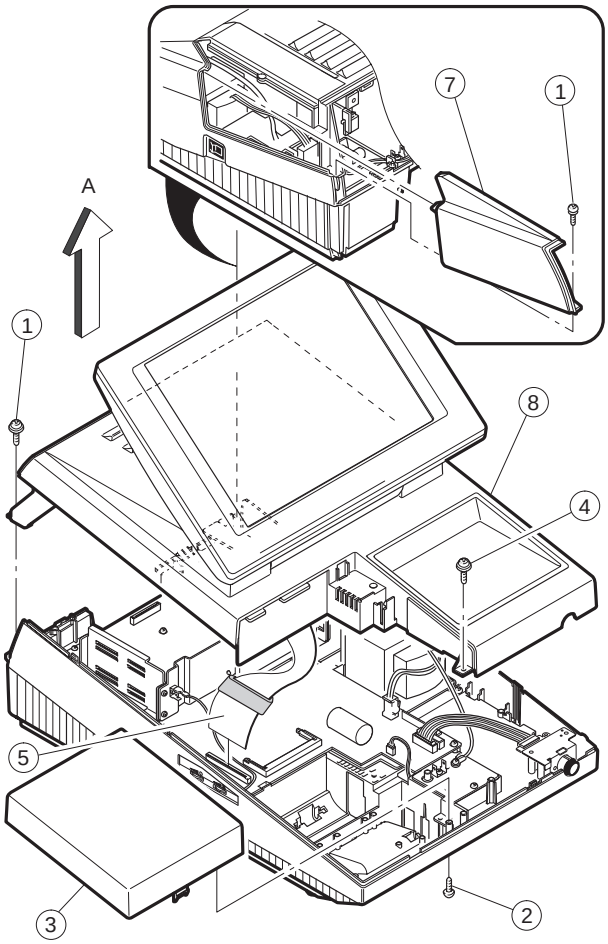
When the rear display is removed and then reinstalled, service resetting is required.

Install the Rear display in the reverse order of removal.

5. Removing the Top cabinet

1) Remove the two Screws ①.
2) Remove the Side cabinet ⑦.
3) Remove the Screw ②.
4) Remove the Printer cover ③.
5) Remove the Screw ④.
6) Remove the Top cabinet ⑧.
   a) Lift the top cabinet straight in the direction of arrow A. (Be careful not to pull the cable between the LCD I/F PWB of the top cabinet and the MAIN PWB of the Bottom cabinet.)
   b) Pull and remove the following cables between the LCD I/F PWB of the top cabinet and the MAIN PWB of the Bottom cabinet.

• LCD Cable ⑤ : MAIN PWB : CN6
• Earth wire ⑥.

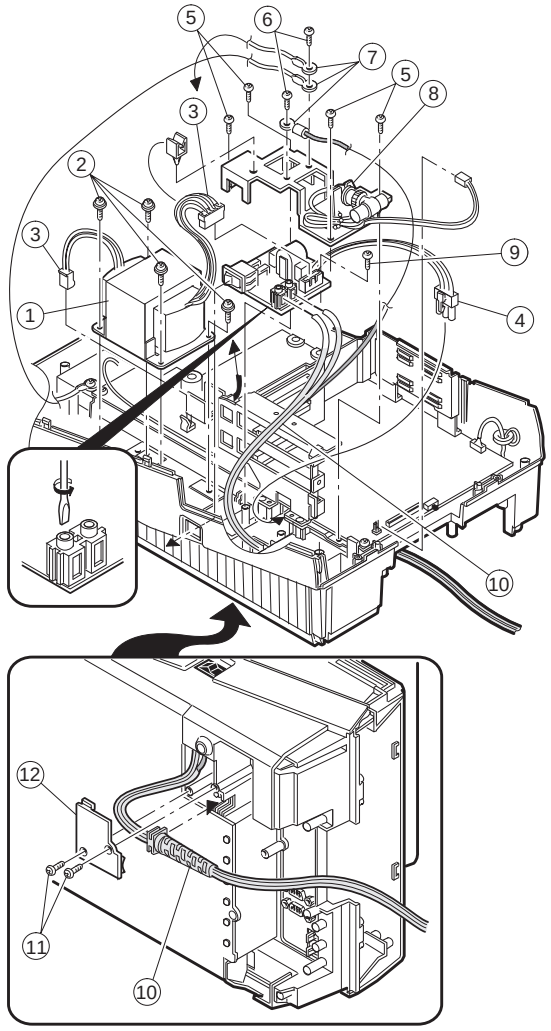


6. Replacing the Top cabinet

Install the top cabinet in the reverse order of removal. Before installation, make sure that each connector is securely connected.

7. Removing the Power transformer, NF PWB and AC cord

1) Remove the Power transformer ①.
   a) Remove the four Screws ②.
   b) Remove the two Connectors ③.
2) Remove the NF PWB ④.
   a) Remove the four Screws ⑤.
   b) Remove the two Screws ⑥ and the three Earth wire ⑦.
   c) Remove the NF angle unit ⑧.
   d) Remove the Screw ⑨.
3) Remove the AC cord ⑩.
   a) Use a minus screwdriver to loosen the AC cord fixing screws (2 pcs.) of the NF PWB ④ unit.
   b) Remove the two screws ⑪.
   c) Remove the AC cord cover ⑫.
   d) Remove the AC cord ⑩ from the NF PWB ④.



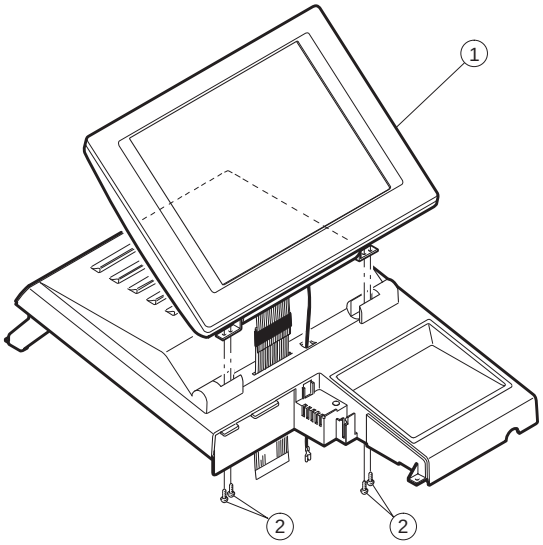
8. Replacing the Power transformer, NF PWB and AC cord

Install the in the Power transformer, NF PWB and AC cord in the reverse order of removing. Before installing, make sure that each connector is connected securely.

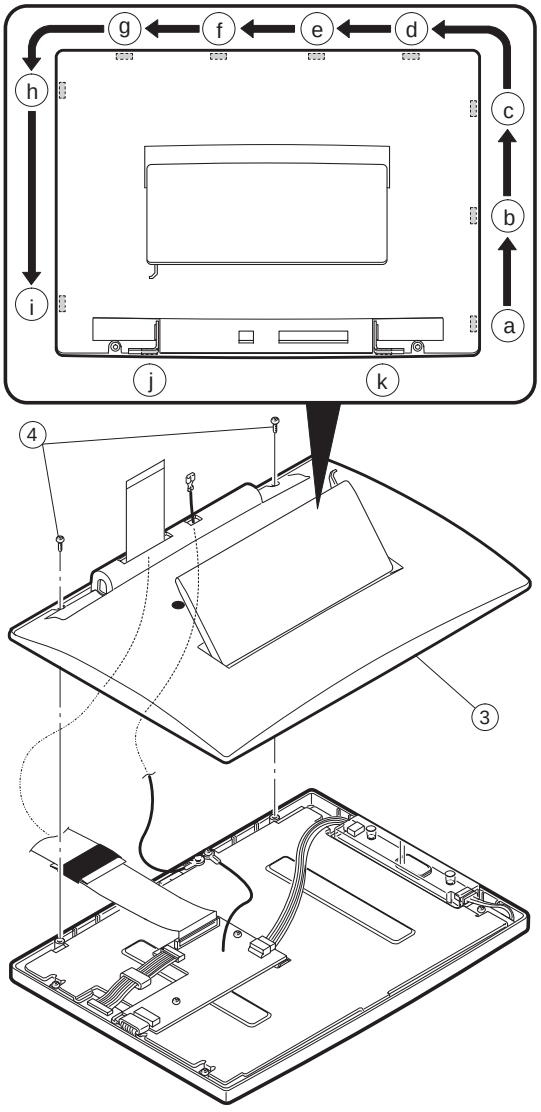
∗When connecting the AC cord to the power supply unit in assembly, tighten with the torque of 3 kg/cm ± 1 kg/cm.

9. Removing the LCD unit

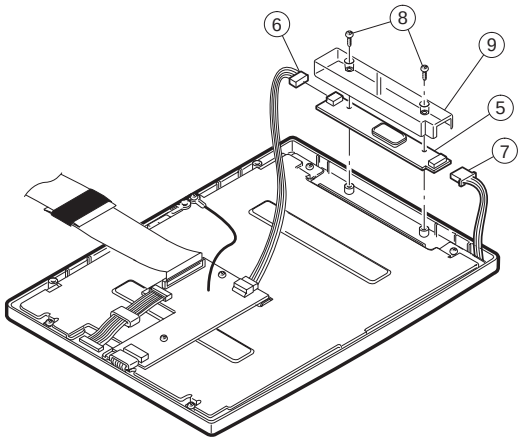
1) Remove the LCD unit ①.
   a) Remove the four Screws ②.



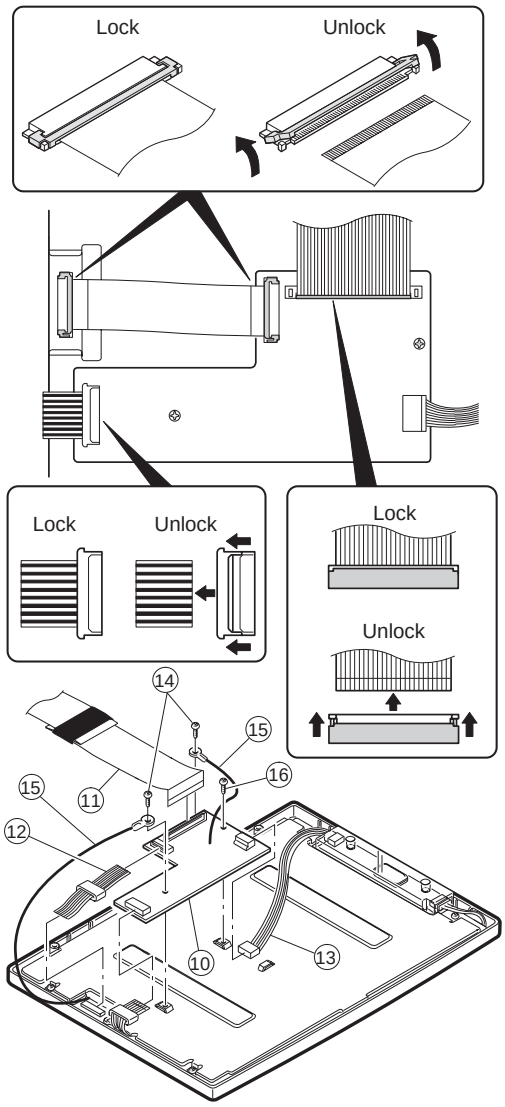
2) Remove the LCD rear cabinet ③.
   a) Remove the two Screws ④.
   b) Remove the pawls ⓐ to ⓘ of the LCD rear cabinet ③ in that order.



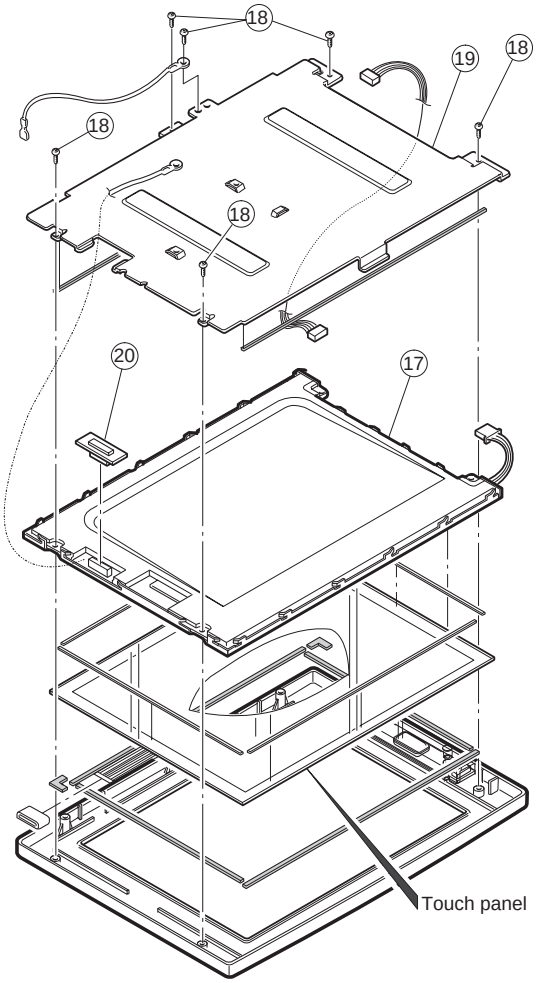
3) Remove the Inverter PWB ⑤.
   a) Remove the Inverter cable ⑥.
   b) Remove the CCFT cable ⑦.
   c) Remove the two screws ⑧.
   d) Remove the Inverter cover ⑨.



4) Remove the Touch panel PWB unit ⑩.
   a) Remove the LCD cable(40P) ⑪.
   b) Remove the LCD cable(30P) ⑫.
   c) Remove the Inverter cable ⑬.
   d) Remove the two Screws ⑭ and the two Earth wire ⑮.
   e) Remove the Screw ⑯.



5) Remove the LCD ⑰.
   a) Remove the five Screws ⑱.
   b) Remove the LCD plate ⑲.
   c) Remove the LCD PWB unit ⑳.



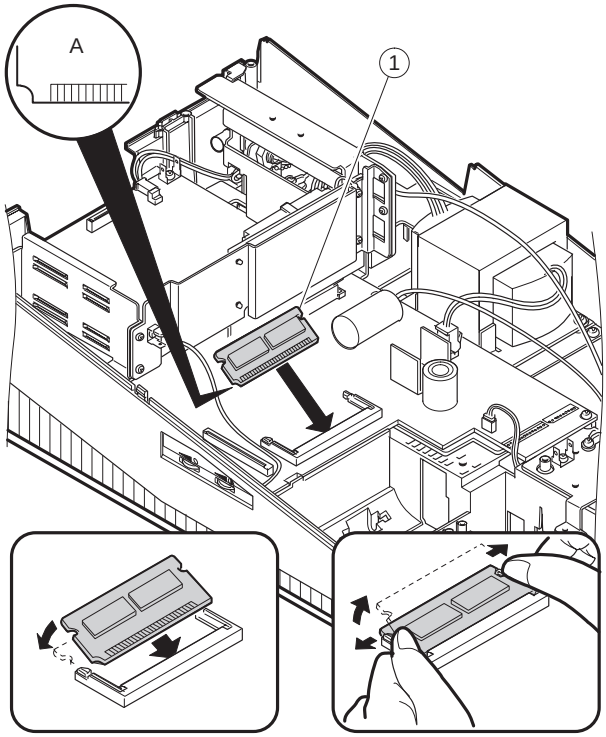
10. Replacing the LCD unit

Install the LCD unit in the reverse order of removal.
Before installing, make sure that each cable are connected securely.

11. Expansion RAM Board : UP-S02MB2M

Make sure to save data before installing this option

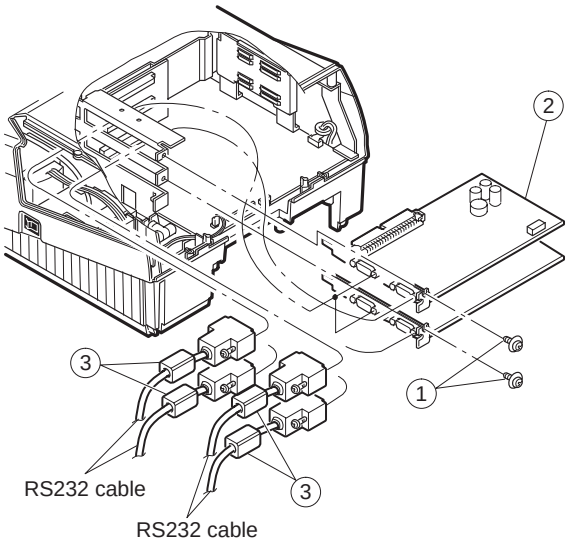
1) Remove the top cabinet.
2) Install the Expansion RAM Board ① into the Option RAM connector on the Main PWB.
   a) Insert the Expansion RAM Board at a slant into the option RAM connector.
   b) Insure the Expansion RAM Board is locked by the arms of the option RAM connector.
      ∗ Only one UP-S02MB2M option may be installed.
      ∗ Be careful of the direction of the Expansion RAM Board when installing. Install the Expansion RAM Board with the notch part of the PWB (Figure A) located to the right. Installing the Expansion RAM Board in the wrong direction may damage the connector or damage the machine.



3) Removing the Expansion RAM Board.
   a) Expand the arms of the option RAM connector right and left.
   b) The Expansion RAM Board will be lifted automatically.

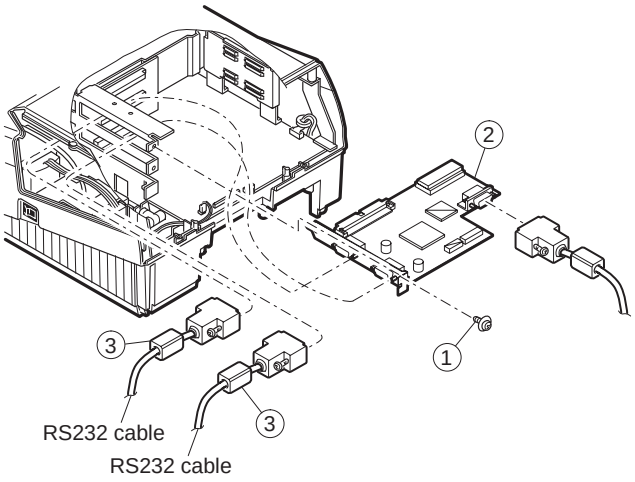
12. RS232 I/F: ER-A7RS2

1) Remove the rear cover.
2) Remove the rear display.
2) Remove the two screws ① from the chassis.
3) Insert the I/F PWB ② to the connector.
4) Fix the I/F BRACKET to the chassis with screws ①.
5) Install the ferrite Core ③.



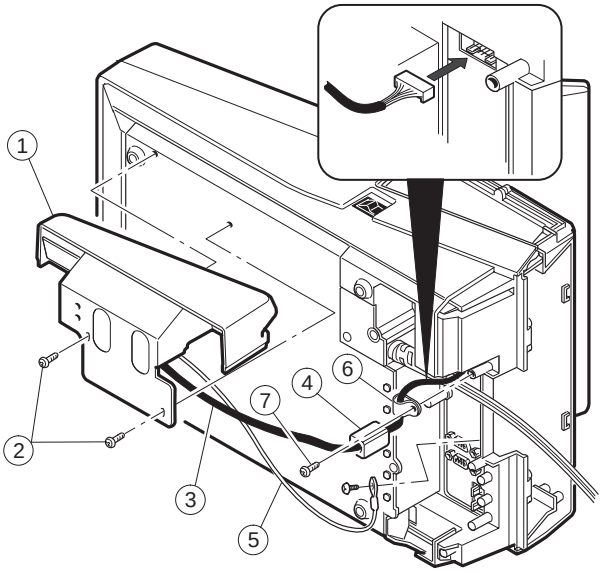
13. EFT I/F: ER-02EF2

1) Remove the rear cover.
2) Remove the rear display.
3) Remove the screw ① from the chassis.
4) Insert the I/F PWB ② to the connector.
5) Fix the I/F BRACKET to the chassis with screws ①.
6) Install the ferrite Core ③.



14. MCR UNIT: UP-E12MR2

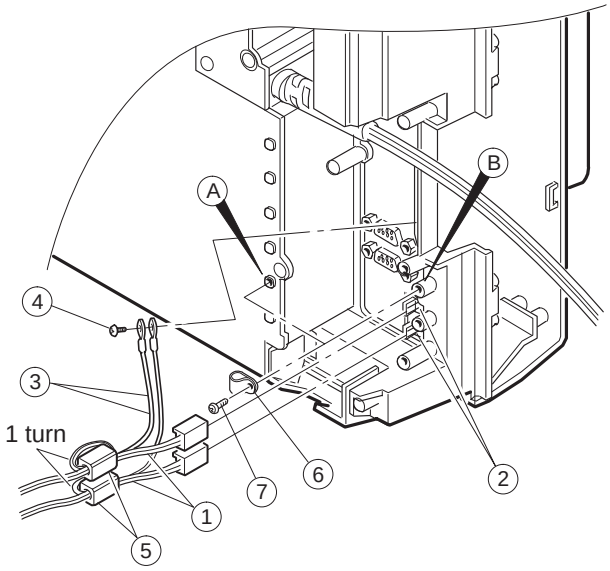
1) Fix the MCR ANGLE ① to the lower cabinet with two screws ②.
2) Connect the MCR cable ③ to the MCR connector with the cable holder ⑥, and tighten the screw ⑦ on the back of the lower cabinet.
3) Install the ferrite Core ④ to the MCR cable.



4) Fix the earth wire ⑤ from the UP-E12MR2 with the screw.

15. DRAWER BOX UNIT: ER-03DW/04DW/05DW

1) Connect the drawer cable ① to the drawer connector ②.
2) Fix the earth wire ③ from the drawer box unit with the screw ④.

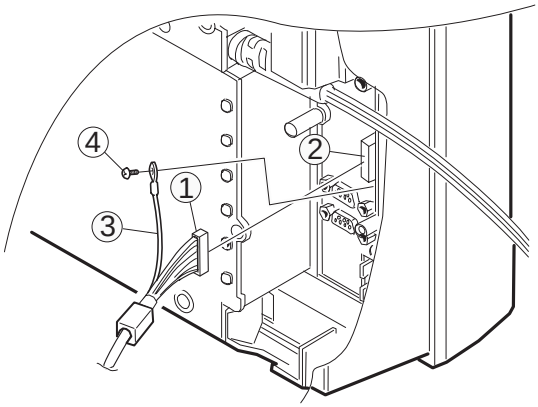


3) Install the ferrite Core ⑤ to the drawer cable. (Max. 2)
4) Fix the drawer cable ① with the cable holder ⑥, and tighten the screw ⑦ on the back of lower cabinet Ⓐ or Ⓑ.

16. REMOTE DISPLAY : UP-P16DP

When the remote display is installed, service resetting is required.

1) Installing the remote display.
2) Connect the Display cable ① to the display connector ②.
3) Fix the earth wire ③ from the display unit with screw ④.



17. HOW TO EXTEND DISPLAY POLE

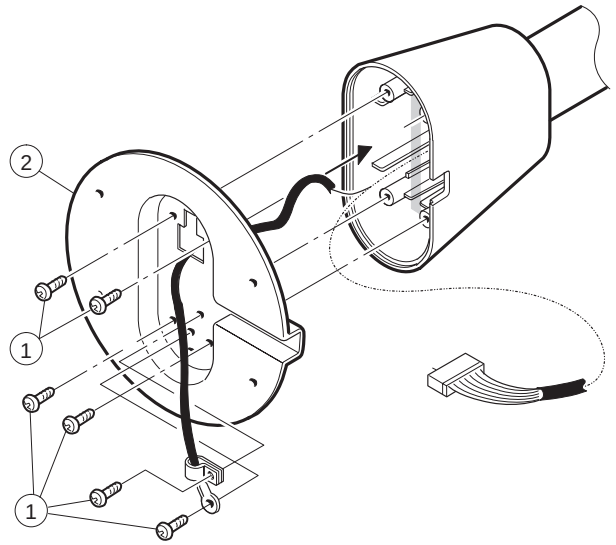
The pole can be extended by installing the attached pole to the standard pole.

COMPONENT LIST:

No.	NAME	USE	Q'ty
⑪	Pole cabinet	Pole extension	2
⑫	Screw (M2 x 8)	Pole connection	4
⑬	Screw (M4 x 16)	Securing the UP-P16DP to the wooden table	4
⑭	Screw (M4 x 20)	Securing the UP-P16DP to the metal table	4
⑮	Nut	Securing the UP-P16DP to the metal table	4

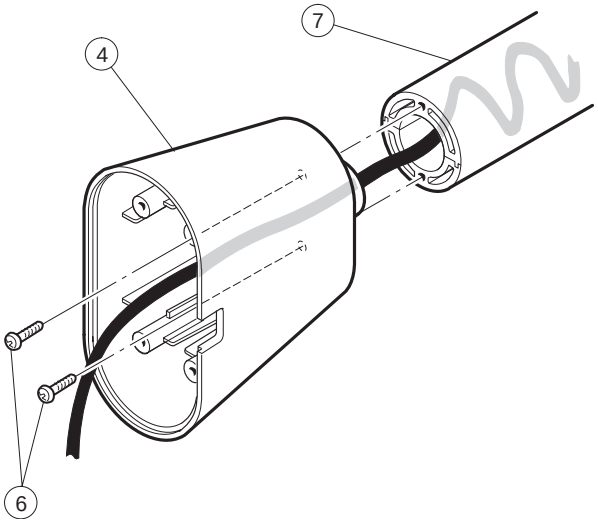
1) Remove the six screws ①.

2) Remove the Base angle ②.



3) Remove the two screws ⑥.

4) Remove the Base cabinet ④ from the pole cabinet ⑦.



5) Turn the ratchet ⑨ connected to the pole cabinet ⑦ to the unlocked position and pull it out from the display unit ⑧ as shown in Fig. A.

6) Remove the two screws ⑩.

7) Remove the pole cabinet ⑦ from the Ratchet ⑨.

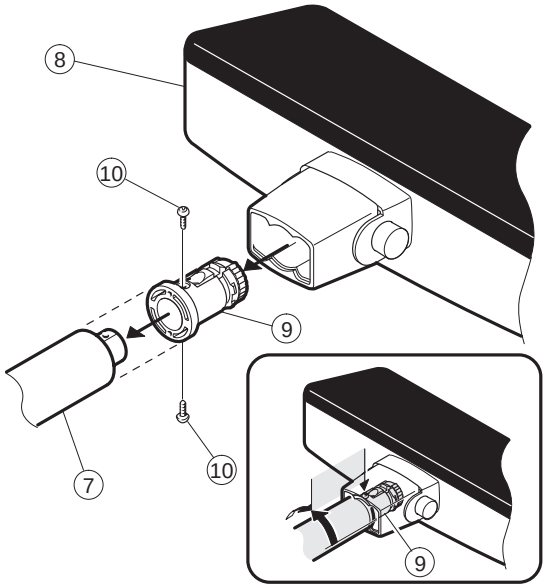
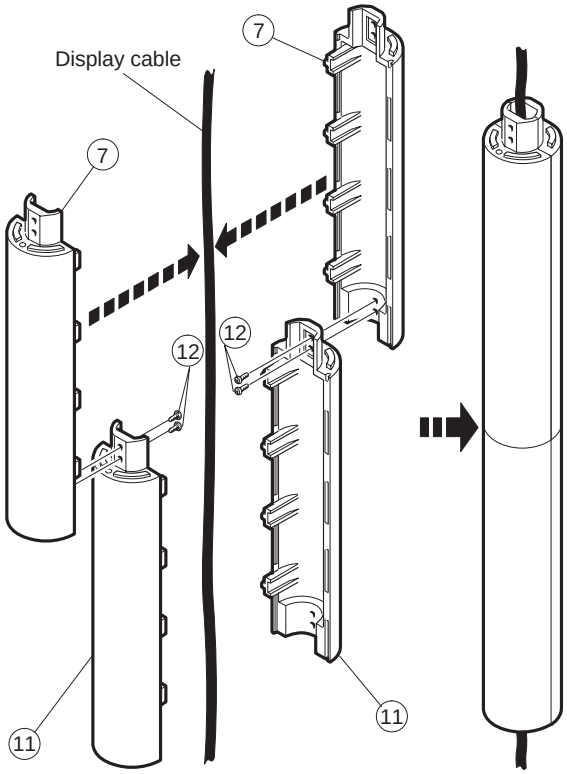


Fig. A

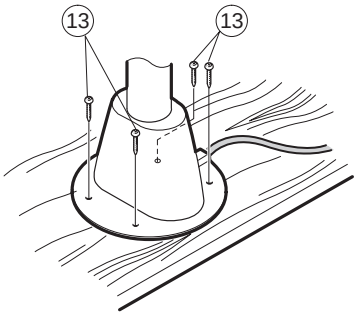
8) Install the attached pole cabinet ⑪ to the pole cabinet ⑦ to fix it with the screw ⑫.

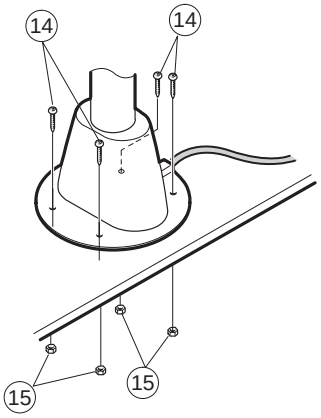


9) Install the extension pole cabinet ⑪ in the opposite order of the disassembly.

10) Fastening onthe table: Secure the Base cabinet ② using the screw.

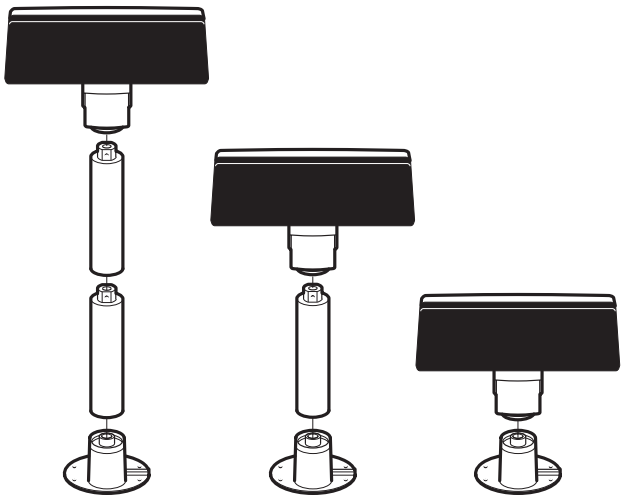
No.	NAME	USE	Q'ty
⑬	Screw (M4 x 16)	Securing the UP-P16DP to the wooden table	4
⑭	Screw (M4 x 20)	Securing the UP-P16DP to the metal table	4
⑮	Nut	Securing the UP-P16DP to the metal table	4





Lowering the height of the UP-P16DP

Remove the standard pole and attach the base cabinet ④ to the ratchet ⑨.



18. Built-in Printer: UP-T80BP

1. UP-T80BP INSTALLATION

1. Remove the BOTTOM PLATE ②.

1) Remove the three SCREWs ①.
2) Remove the BOTTOM PLATE ②.
3) Remove the SCREW ③, CABLE CLAMP ④ and POWER SUPPLY CABLE ⑤.

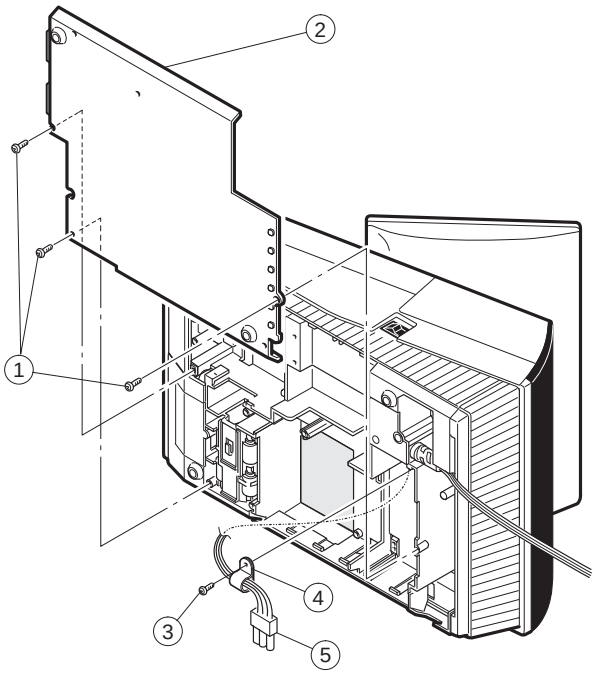


Fig. 1

2. Install the PS+CONTROL PWB ⑥.

Caution: The power supply unit is an important item. Make sure that the unit code is RDENC 1010RCZZ.

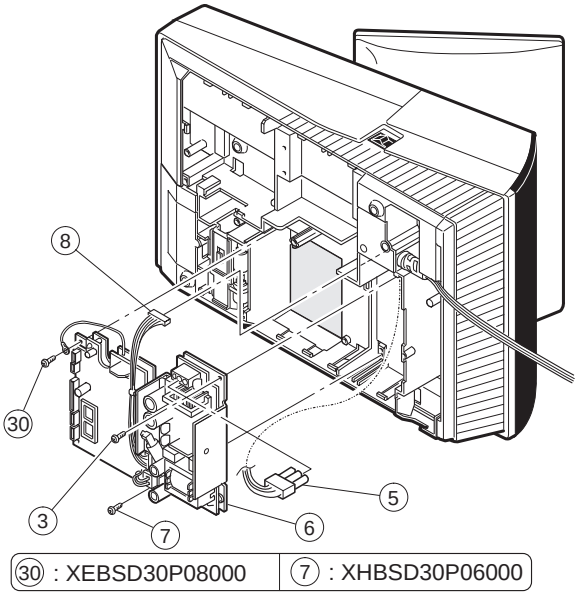
1) Fix the PS+CONTROL PWB ⑥ with three SCREWs ⑦ ㉚, ③

∗ SCREW ③: Use the screw which was fixing the CLAMP ④

∗ SCREW ㉚: fix the screw with earth WIRE.

3. Connect the POWER SUPPLY CABLE ⑤ to the PS+CONTROL PWB ⑥. (No. CN1)

4. Connect the I/F CABLE ⑧ of the PS+CONTROL PWB ⑥ to the UP-3301 MAIN PWB (No.CN20)



㉚ : XEBSD30P08000	⑦ : XHBSD30P06000

Fig. 2

5. Remove the PRINTER cover ⑨.

1) Remove the screw ⑩.

2) Remove the PRINTER cover ⑨.

6. Install the four PAPER ROLLERs ⑪.

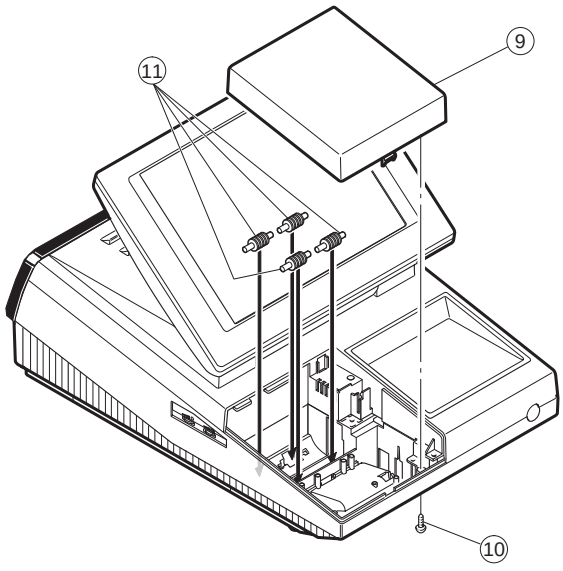


Fig. 3

7. Install the SWITCH UNIT ⑫.

1) Fix the SWITCH UNIT ⑫ on the cabinet pawl Ⓐ.

2) Pass the SWITCH UNIT CABLE ⑬ through the hole Ⓑ.

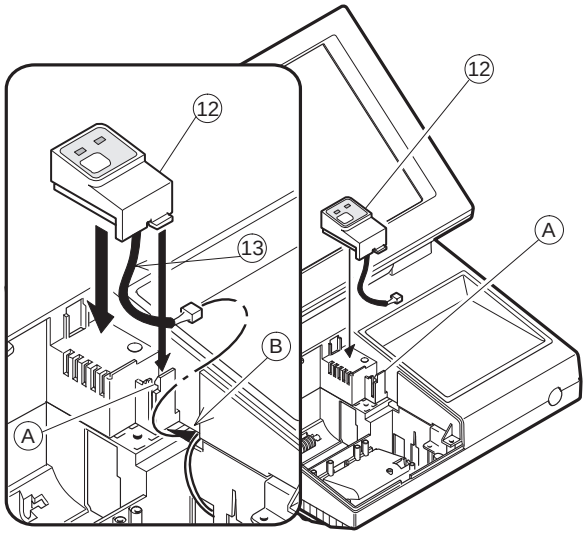


Fig. 4

8. Install the AUTO CUTTER RELAY PWB UNIT ⑭.

1) Install the AUTO CUTTER RELAY PWB UNIT ⑭ with SCREW ⑮.

2) Pass the AUTO CUTTER RELAY PWB CABLE ⑯ through the hole Ⓒ.

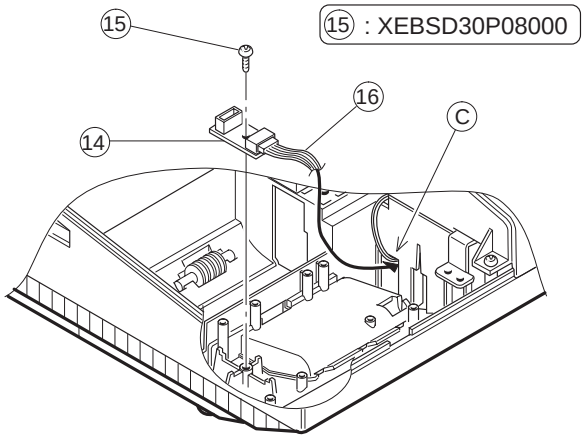


Fig. 5

9. Install the PAPER GUIDE ⑰ to the PRINTER UNIT ⑱.

10. Install the thermal HEAD CABLE ⑲ to the PRINTER UNIT ⑱.

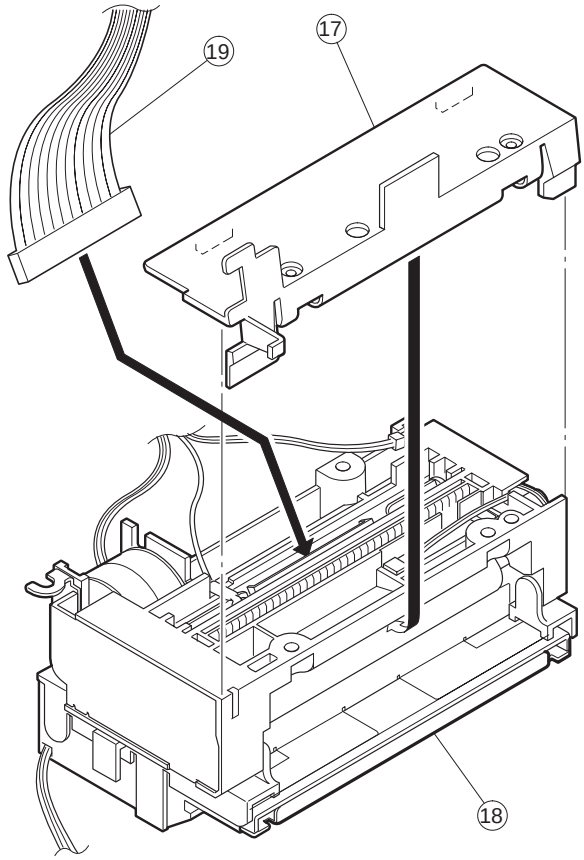


Fig. 6

11. Install the PRINTER UNIT ⑱.

1) Connect the AUTO CUTTER CABLE ⑳ to the AUTO CUTTER RELAY PWB ⑭.
2) Pass the HEAD CABLE ⑲ through the hole Ⓒ.
3) Pass the MOTOR CABLE ㉑ and SENSOR CABLE ㉒ through the hole Ⓓ.
4) Open the PRINTER UNIT ⑱.
5) Fix the PRINTER UNIT ⑱ with four SCREWs ㉓

∗Fix the SCREWs ㉓ in the order of ㉓-ⓐ to ㉓-ⓓ.

6) Fix the two EARTH WIREs ㉔ with a SCREW ㉕.

㉓-ⓐ : XEBSD26P06000	㉓-ⓑ : XEBSD26P06000
㉓-ⓒ : XEBSD26P08000	㉓-ⓓ : XEBSD26P08000
㉕ : XHBSD30P06000	

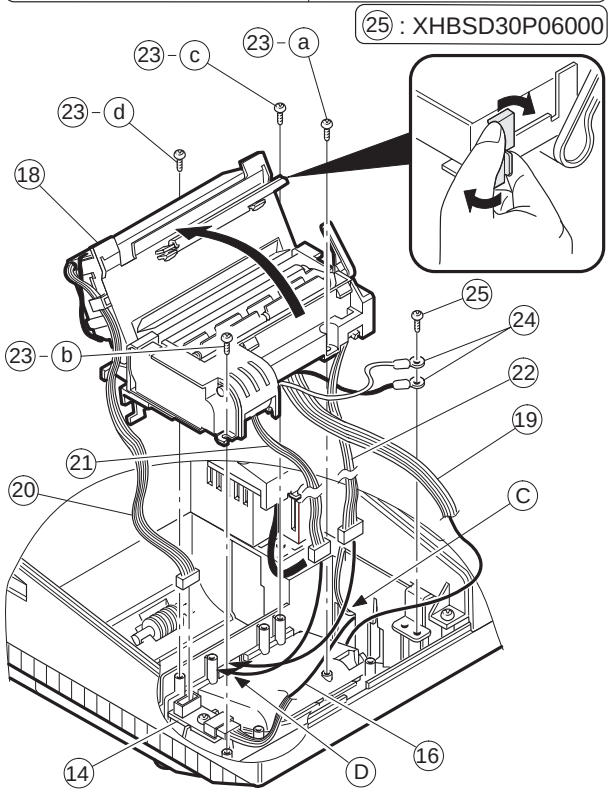
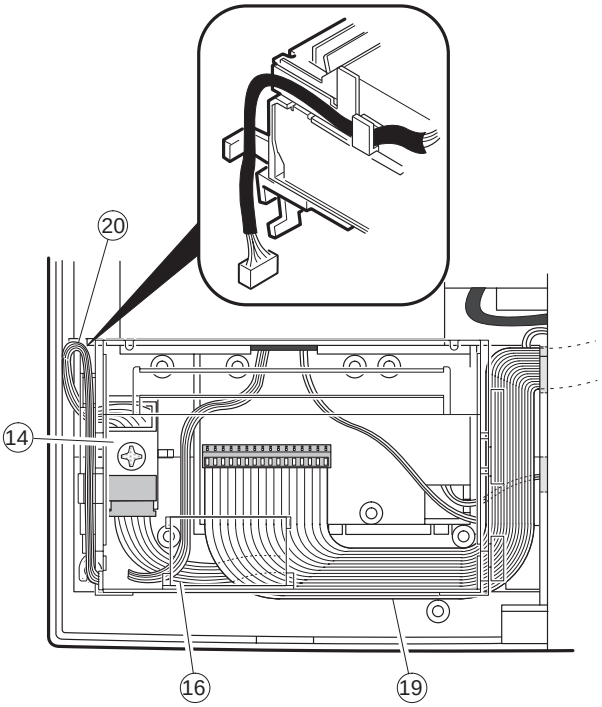


Fig. 7

12. Wiring for each cables as shown below



13. Connect the Printer cables to the CONTROL PWB.

1) SWITCH UNIT CABLE ⑬: Connect to the CN7.
2) HEAD CABLE ⑲: Connect to the CN5.
   Attach the FERRITE CORE ㉖ and CABLE CLAMP ④.
   Fix the CABLE CLAMP ④ with a SCREW ㉘.
3) AUTO CUTTER RELAY PWB CABLE ⑯: Connect to the CN4.
4) MOTOR CABLE ㉑: Connect to the CN2.
5) SENSOR CABLE ㉒: Connect to the CN6.
6) I/F CABLE ⑧: Attach the Ferrite core ㉛.

㉘ : XEBSD30P08000

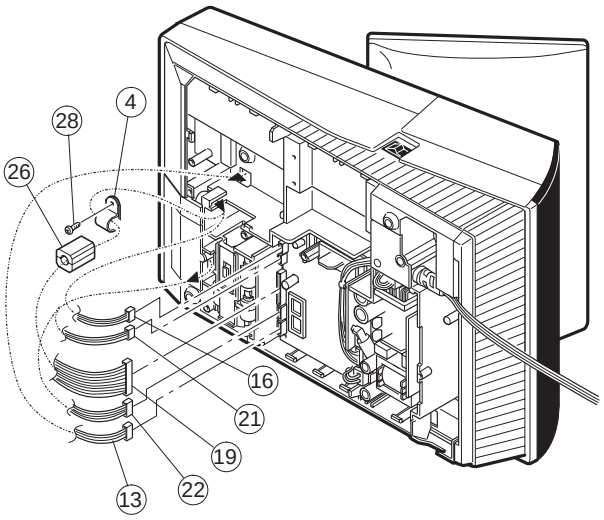


Fig. 8

14. Routing for each cables as shown below

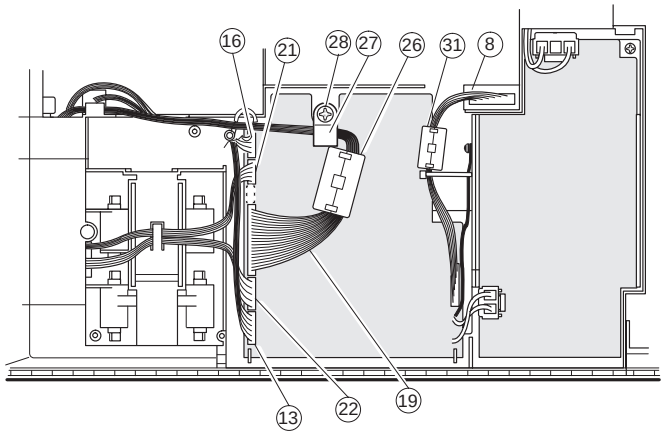


Fig. 9

15. Install the BOTTOM PLATE ②.

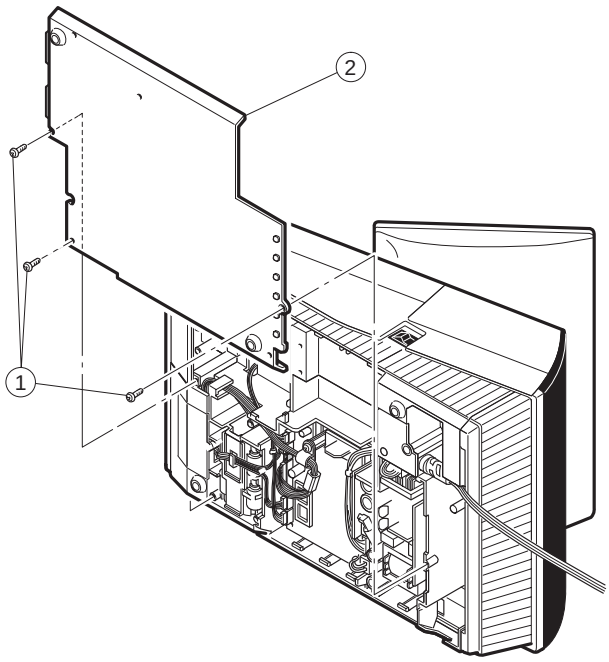


Fig. 10

16. Install the PRINTER COVER ㉙.

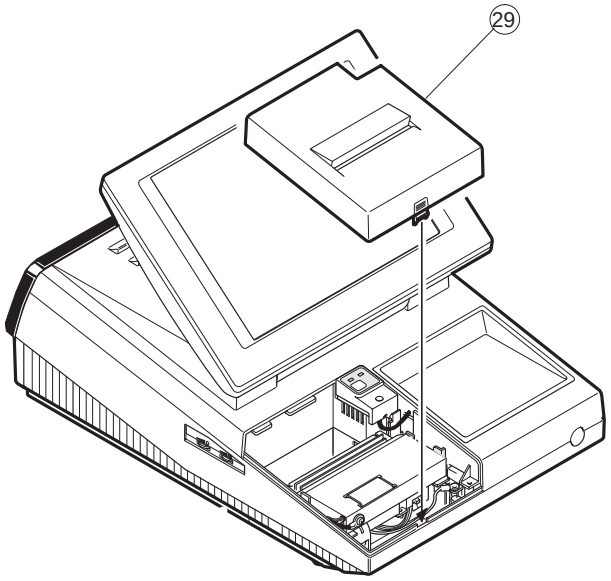
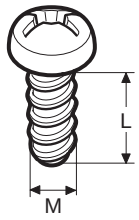
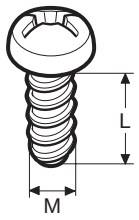


Fig. 11

1. LIST FOR SCREWs

	No.	PARTS CODE	M [mm]	L [mm]
	⑮	XEBSD30P08000	3	8
	㉚			
	㉘			
	㉓-ⓐ	XEBSD26P06000	2.6	6
	㉓-ⓑ			
	㉓-ⓒ	XEBSD26P08000	2.6	8
	㉓-ⓓ			
	⑦	XEBSD30P06000	3	8
	㉕			

2. INSTALLATION OF THE PAPER NEAR END SENSOR

[PARTS LIST]

No.	PARTS NAME	PARTS CODE	NOTE
1	PAPER NEAR END SENSOR	DUNTK3819BHZZ	SENSOR UNIT, FIXING SCREW
2	NEAR END SENSOR CONNECTOR	QCNCM6865RC0B	2 pin connector

1) Remove the BOTTOM PLATE .
2) Remove the PS+CONTROL PWB .
3) Solder the CONNECTOR ① to the PS+CONTROL PWB (No. CN1)
4) Install the NEAR END SENSOR UNIT ③ to the CABINET , and fix it with the fixing SCREW ②.

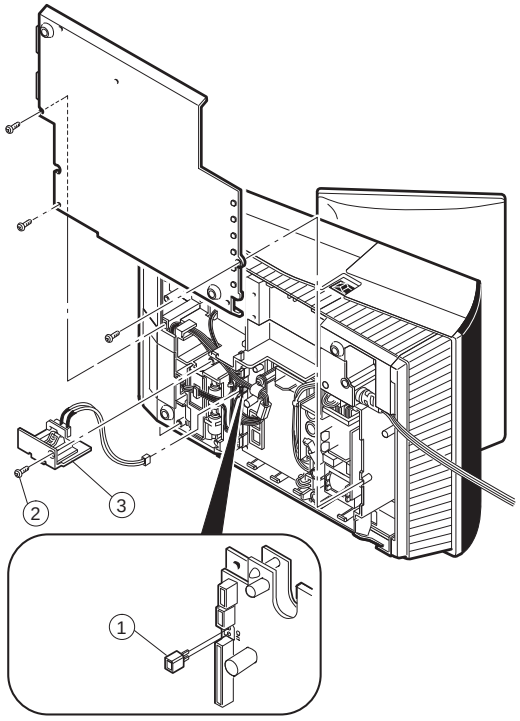
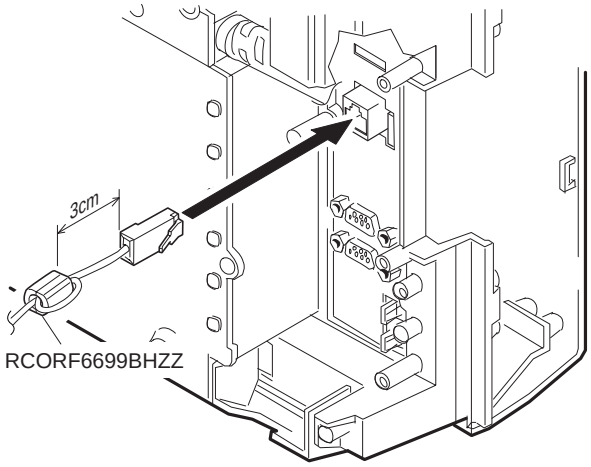


Fig. 12

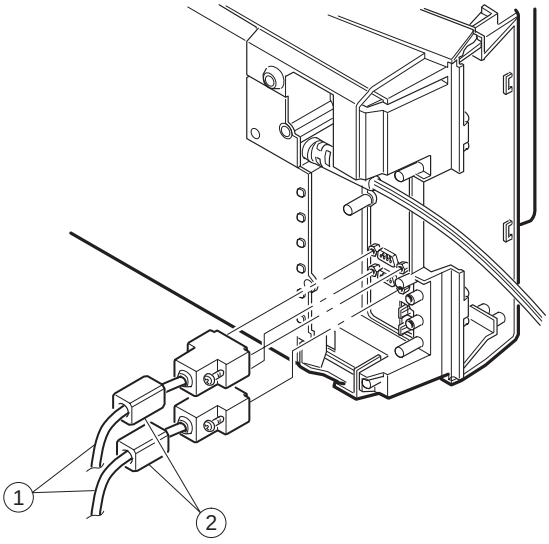
19. LAN

• The LAN connection is standard using a RJ45 connector.



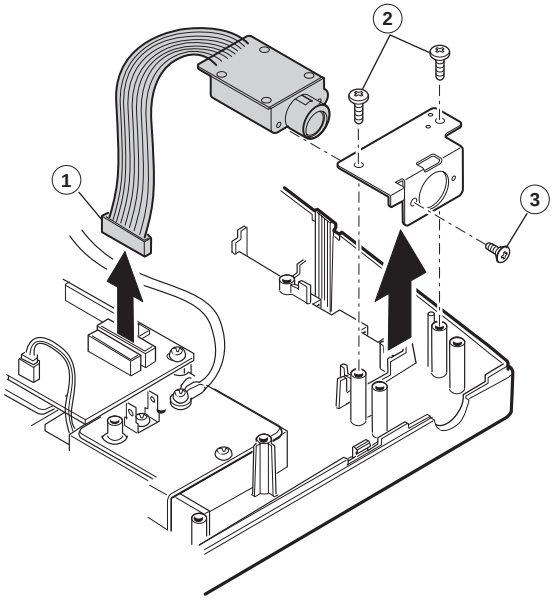
20. RS232 I/F: STANDARD

1) Connect the RS232 cable ① to the desired connector.
2) Install the ferrite Core ② to every RS232 cable installed.



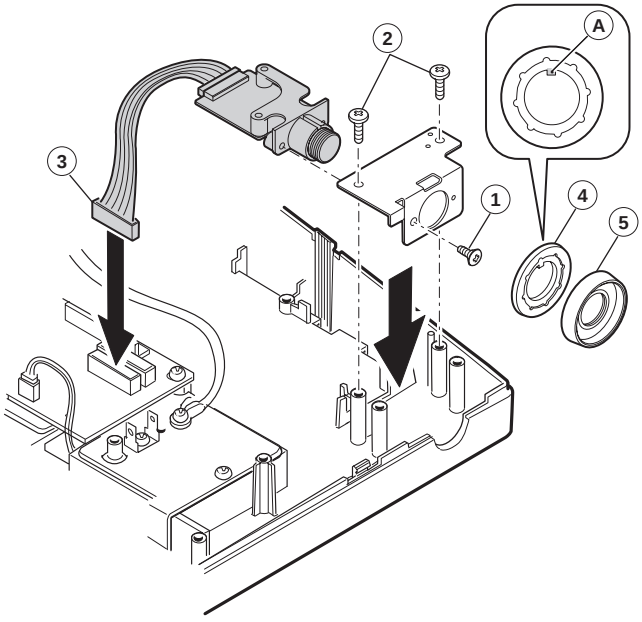
21. CONTACTLESS KEY

1) Remove the connector of a clerk key ①, Remove the two screws ②, and remove the clerk key unit.
   Remove the screw ③ and remove the clerk key.

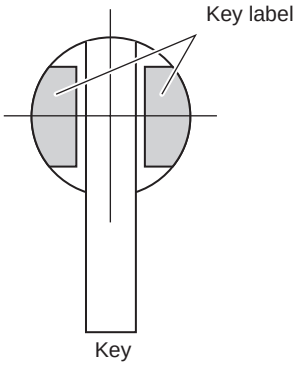


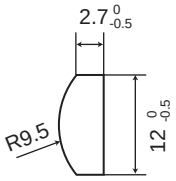
2) Attach the contactless key to the plate. Attach the contactless key unit to the upper cabinet with screws ②, and set the connector ③. Attach the upper cabinet, attach the lid ④, and attach the cap ⑤ tightly.

Note: The peojection Ⓐ side of the lid ④ should be upper side.



■ Contactless key label

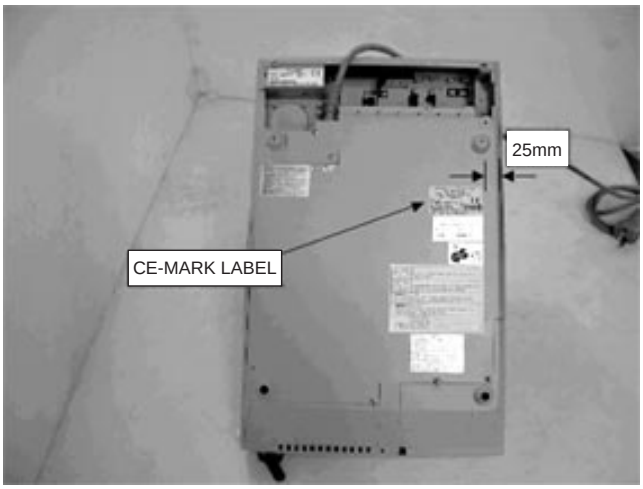




Key label size

■ Attachment HZ-R01CK

Note: In case contactless key attaches, be sure to attach CE-Mark label (accessories) to a bottom cabinet.
Using contactless key of the product with which CE-Mark is not attached is forbidden by law.
Refer to the following figure for the attachment position of CE-Mark.



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